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3	National Programme on Improved chulhas	150 Lakhs
4	National Biomass Gasifier Programme	40 MW
5	Solar Photovoltaic (SPV) Demonstration Programme	
	SPV Home Light	2 Lakhs
	SPV Lanterns	3 Lakhs
	SPV Power Plants	1.6 MW
6	SPV Pumps	4000 Nos.
7	Solar Thermal (ST) Energy	
	Solar Water Heating Systems (M.sq. collector area)	1.5 Lakhs
	Solar Cooker	1.5 Lakh Nos.
8	Wind Pumps & Hybrid Systems	1000 Nos.
		250 kW
9	Wind Power	1000 MW
10	Small Hydro Power	130 MW
11	Biomass Power	314 MW
12	Solar Power	141.5 MW
13	Energy from Urban & Industrial wastes	42 MW

MW = Mega Watt; kW Kilo Watt; M.sq. - Metre Square

**Electrification of villages through Renewable Energy Sources in  
Andhra Pradesh**

1131. SHRI RAMA MUNI REDDY SIRIGIREDDY: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

- (a) the target set for the next five years to generate power through Renewable Energy Sources;
- (b) the strategy that Government is going to adopt to achieve the target; and
- (c) the total number of villages that are going to be electrified in the coming five years in the State of Andhra Pradesh through Renewable Energy Sources?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) and (b) The strategy and targets for the 10th Five Year Plan are under formulation and have not yet been finalized.

(c) The Ministry of Non-Conventional Energy Sources proposes to implement a programme for the electrification of villages in remote and difficult areas in the country during the next 10-11 years. The State-wise targets have not yet been worked out.

**Setting up of first Geo-thermal Power Plant in the Country**

1132. SHRI K. RAMA MOHANA RAO: Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

(a) the various types of Non-conventional Energy Sources available in the country;

(b) whether Government propose to set up its first geo-thermal power plant in the country;

(c) if so, the details thereof;

(d) whether any study has been carried out in this regard; and

(e) if so, the details of study and the viability of the said project?

THE MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (SHRI M. KANNAPPAN): (a) The main non-conventional energy resources include solar, wind, biomass, small hydro power, geo-thermal and ocean and the Ministry have ' been implementing various programmes and schemes based on these resources.

(b) and (c) Yes, Sir. The Ministry have taken up a project on the development of Tattapani geo-thermal fields, Chhattisgarh for power generation. Under the initial phase of this project, a pilot demonstration geo-thermal power plant of 300 kW capacity at an estimated cost of Rs. 4.60 crore will be installed at this site through National Hydro-electric Power Corporation.

(d) and (e) A study sponsored by the Ministry was carried out by National Geophysical Research Institute, Hyderabad at the above mentioned site to ascertain various parameters for installing a geo-thermal power plant of suitable capacity. Based on the recommendations of this study, the above pilot demonstration